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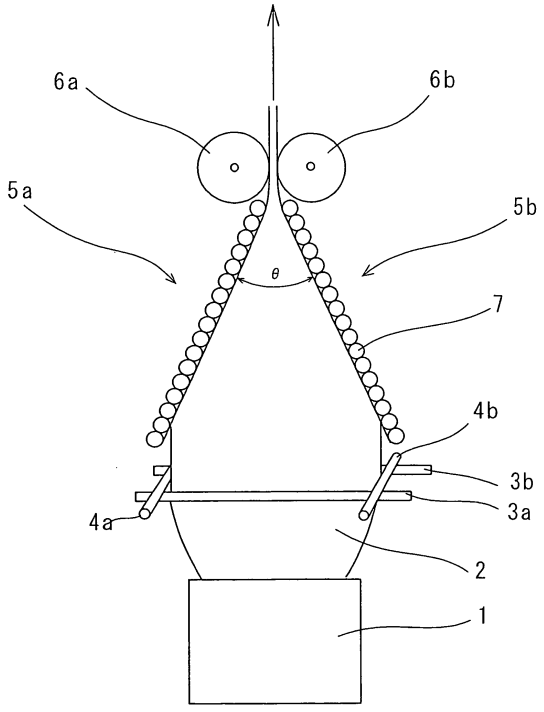
(54) Method of inflation extrusion molding, extrusion molding apparatus therefor, and process for producing pressure-sensitive adhesive sheet

(57) The invention provides a method of inflation extrusion molding, comprising: introducing one or more resin materials extruded from one or more extruders into a die (1); subsequently extruding the resin material(s) (2) from the die (1) and inflating the extrudate into a cylindrical shape having a predetermined diameter by blown-film extrusion; and then passing the cylindrical inflated resin material through a space between stabilizers (5a, 5b) which face each other at a predetermined angle (θ), to deform the cylindrical resin material into a flat tube shape having an elongated elliptic section, thereby producing a film or sheet having a predetermined width, wherein the deformation of the cylindrical inflated resin material into a flat tube shape having an elongated elliptic section is assisted by a guide device to thereby facilitate the deformation.

Fig. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 04 02 2191

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 03/016023 A (WINDMOELLER & HOELSCHER [DE]; BACKMANN MARTIN [DE]; BECKMANN HANS-UDO) 27 February 2003 (2003-02-27) * claims 1,7; figures 1-3 * * page 3, line 13 - page 4, line 16 * * page 4, line 19 - line 20 * & DATABASE WPI Week 200325 Thomson Scientific, London, GB; AN 2003-256681 & WO 03/016023 A (WINDMOELLER & HOELSCHER KG) 27 February 2003 (2003-02-27) * abstract * -----	1,2,4	INV. B29C47/90 B29C47/00 ADD. B29C53/10 B29C47/06
X	GB 2 109 298 A (MITSUI PETROCHEMICAL IND; PLACO CO LTD) 2 June 1983 (1983-06-02) * claim 1; figure 5 * * page 4, line 12 - line 16 * -----	1,2,4,5	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	28 October 2009	Baran, Norbert

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	28 October 2009	Baran, Norbert

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Application Number
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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

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LACK OF UNITY OF INVENTION
SHEET B

Application Number
EP 04 02 2191

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1a, 2, 3, 4a, 5, 6

   A method of inflation extrusion molding comprising introducing one resin material extruded from one extruder into a die.

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2. claims: 1b, 2, 3, 4b, 5-9

   A method of inflation extrusion molding comprising introducing more resin materials extruded from more extruder into a die.

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 04 02 2191

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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28-10-2009

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